

**BMP**  
**USE PROPYLENE GLYCOL BASED ANTIFREEZE**

**Background:**

Vehicles serviced by most vehicle maintenance facilities currently use antifreeze with ethylene glycol as a radiator coolant. Many of the other pieces of equipment used at federal facilities also contain ethylene glycol based antifreeze.

Ethylene glycol is a water-soluble organic compound with a high biological oxygen demand (BOD) and is potentially toxic to aquatic and mammalian organisms at relatively low concentrations. Ethylene glycol is also a chemical listed on the Toxic Release Inventory (TRI).



**Figure 1 Used antifreeze in AAFES Service Center**

**Recommendations:**

Vehicle maintenance shops and other shops using antifreeze should substitute propylene glycol for ethylene glycol for use as antifreeze.

Propylene glycol is "generally recognized as safe" by the U.S. Food and Drug Administration and is an ingredient in many consumer products. Propylene glycol is biodegradable and readily degrades in activated treatment systems. Propylene glycol can be recycled using most ethylene glycol recycling units.

DLA Environmental Products Catalog (<http://www.dscr.dla.mil/>)

Propylene glycol

55-gallon drum

NSN: 6850-01-383-3918

Price: \$287.10

5-gallon can

NSN: 6850-01-441-3257

Price: \$20.00

1-gallon container

NSN: 6850-01-383-4068

Price: \$6.05

**Benefits:**

- Eliminate or reduce purchase of a hazardous chemical listed on the TRI.
- Eliminate or reduce chance of a release of ethylene glycol to the environment.
- Eliminate or reduce personnel exposure to ethylene glycol.